CLAIMS

- 1. 19. (Canceled)
- 20. (Currently Amended) An apparatus capable of three dimensional (3D) imaging from one vantage point independent of profilometry comprising:
 - a housing having a physical terminus;
 - an image sensing array (ISA); and
 - an optical element in optical communication with the ISA,

wherein all light received by the apparatus for 3D imaging and any light emitted by the apparatus for 3D imaging passes through a physical terminus of the instrument apparatus at which point a maximum separation between any two light rays used for 3D imaging does not exceed 2 inches.

- (Original) The apparatus of claim 20 wherein a capture end further comprises:
 an illumination source.
- (Original) The apparatus of claim 20 wherein the optical element is one of a lens, a reflector, and a light guide.
- 23. (Original) The apparatus of claim 20 wherein three dimensional imaging is independent of time of flight of light reflected from the location to the image sensing array (ISA).
- 24. (Original) The apparatus of claim 20 wherein the three dimensional imaging is performed without requiring motion of the physical terminus of the apparatus.
- (Original) The apparatus of claim 24 wherein the three dimensional imaging method is stereoscopy.
- 26. (Original) The apparatus of claim 20 further comprising a wireless data link.
- 27. (Original) The apparatus of claim 21 wherein the illumination source can vary an incident angle of light impinging on a target surface.

- (Original) The apparatus of claim 24 wherein the three dimensional imaging method performs captures of data from at least two points of view to a target.
- (Original) The apparatus of claim 28 wherein at least two captures are performed sequentially by a same ISA.
- 30. (Original) The apparatus of claim 20 further comprising a controller to automatically vary an optical path of the light rays used to capture a three dimensional image.
- (Original) The apparatus of claim 20 further comprising a display to visualize the data collected.
- 32. (Original) The apparatus of claim 31 wherein visualized data guides a user in the capture of a target surface.
- 33. (Original) The apparatus of claim 20 wherein the 3D image can be made of a target surface that appears substantially homogeneous unless captured at finer than 300 pixels per inch resolution as measured at the target surface.
- 34. (Original) The apparatus of claim 20 wherein the 3D image can be made of a target surface that appears substantially homogeneous to an unaided human eye.

35. - 60. (Canceled)